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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------------|-----------------|-------------------------|---------------------|------------------|
| 09/696,079 | 10/25/2000 | Keisuke Yoshida | ADACHI P198US | 3525 |
| 75 | 90 - 09/24/2004 | | EXAM | INER |
| Davis and Bujold | | | VU, NGOC K | |
| Fourth Floor 500 N. Commercial Street | | | ART UNIT | PAPER NUMBER |
| Manchester, NH 03101 | | | 2611 | |
| | | DATE MAILED: 09/24/2004 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|---|---|---|--|--|--|--|
| Office Action Summers | 09/696,079 | YOSHIDA ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Ngoc K. Vu | 2611 | | | | |
| The MAILING DATE of this communication a Period for Reply | ppears on the cover sheet with the o | correspondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a real if NO period for reply is specified above, the maximum statutory perions Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b). | In no event, however, may a reply be tirely within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from the, cause the application to become ABANDONE | mely filed ys will be considered timely. In the mailing date of this communication. ED (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on | | | | | | |
| 2a) This action is FINAL . 2b) ⊠ Th | nis action is non-final. | | | | | |
| | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4) ☐ Claim(s) 1-19 is/are pending in the application 4a) Of the above claim(s) is/are withdreds 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-3 is/are rejected. 7) ☐ Claim(s) 4-19 is/are objected to. 8) ☐ Claim(s) are subject to restriction and | rawn from consideration. | · | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Examir | ner. | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to th | e drawing(s) be held in abeyance. Se | e 37 CFR 1.85(a). | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the E | Examiner. Note the attached Office | Action or form PTO-152. | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| a) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureat * See the attached detailed Office action for a list | nts have been received. nts have been received in Applicati fority documents have been receive au (PCT Rule 17.2(a)). | ion No ed in this National Stage | | | | |
| | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summary | (PTO-413) | | | | |
| Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/06 Paper No(s)/Mail Date | Paper No(s)/Mail Di 8) 5) Notice of Informal P 6) Other: | ate · Patent Application (PTO-152) | | | | |

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DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

The reference numeral in the specification does not match with the drawing with respect to figure 9 of the instant application. Specifically, on page 59, line 7 in the specification describes "the terminal" with reference numeral "111" while the reference numeral of the terminal is "115" in drawing with respect to figure 9. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1- 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite because there is no antecedent basis for the limitations "the transmission line" in line 11, "the frequency-converted upward signal" in lines 17-18, "the original upward signal" in lines 24-25.

Claim 2 recites the limitation "using a high frequency signal with the same frequency" in lines 7-8. It is unclear what "the same frequency" referred to. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Gurusami et al. (U.S. 5,557,319 A).

Regarding **claim 1**, Gurusami discloses an in-building CATV system connected to a lead-in wire (30) of an external bi-directional CATV system (a headend – see col. 2, lines 59-63) for transmitting a downward signal (e.g., downward signal with frequency band between 54-750MHz as shown in figure 1) inputted from the lead-in wire (30) to plural terminals (12, 16) in a building (10) (see figure 1), comprising:

an up-converter (within subscriber devices such as TV 12 or computer 16 – see figure 1) for frequency-converting an upward signal (return signal) outputted from a subscriber terminal device (e.g., TV 12 or computer 16 – see figure 1) to an in-building upward signal having a frequency higher than that of the downward signal (it is noted that the return signal from the subscriber is generated at subscriber devices, such as TV 12 or computer 16, etc., is up converted to, signal in a higher frequency band, such as 900-950 MHz – see abstract and figure 1) and for transmitting the in-building upward signal toward the lead-in wire (30) from each terminal via the transmission line (22) (transmitting the up-converted signal toward the wire 30 from the terminal via the transmission line 22 - see abstract and figure 1);

a down-converter (66) provided between said transmission line (22) and said lead-in wire (30) (it is noted that gateway 24 can be located within a large building or complex. As shown in figure 2, down-converter 66 within the gateway device 24 is between transmission 22 and wire 30 - see col. 4, lines 1-6 and figure 2) for frequency-converting the in-building upward signal to an upward signal with a frequency lower than that of the downward signal for

outputting to the external bi-directional CATV system (for converting the up-converted signal to a down-converted signal with a frequency lower than that of the downward signal, e.g., frequency band between 5-42 – see figure 2 and col. 3, lines 48-49) and for transmitting the frequency–converted upward signal to said external bi-directional CATV system via said lead-in wire (transmitting the down-converted signal to the headend via the wire 30 - see col. 3, lines 51-54); and

a noise removal means (62, 42 and 64) provided on a transmission path of said in-building upward signal from said up converter to said down-converter for removing a high frequency signal with a specific frequency used in said up-converter for frequency-converting the original upward signal outputted from said terminal device to the in-building upward signal (namely, the up-converted signal from the terminal device is provided to a 900MHz band pass filter 64 via transmission line 22 to the down-converter 66 for removing a high frequency signal with a specific frequency used in the up-converter for up-converting the return signal – see col. 3, lines 45-48 and figure 2).

Regarding **claim 2**, Gurusami discloses the return signal from the terminal device is upconverted to a high frequency signal and then the return signal is down-converted to a signal with frequency band below 54MHz by the down-converter (see abstract and figure 2).

Regarding **claim 3**, Gurusami discloses that the noise removal means comprises a trap circuit (62) provided on a path of the up-converted signal in a gateway device (24) provided on the transmission line (22) (see figure 2).

Allowable Subject Matter

Claims 4-19 would be allowable if rewritten to overcome the rejection(s) under 35
 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hemmie et al. (US 5,437,052 A) disclose a wireless system unitizing microwave frequencies to provide bi-directional transfer of programming information between a common focal point and a plurality of remote locations.

Wang (US 6,160,571 A) teaches a CATV transceiver.

Inagumu (US 6,615,407 B1) and (US 6,581,208 B1) discloses a down-converter and a up-converter in an in-building CATV system.

Freyman et al. (US 5,966,410 A) disclose a method and system for cleaning a frequency band.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc K. Vu whose telephone number is 703-306-5976. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on 703-305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ngoc K. Vu Examiner

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September 17, 2004